

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

75 Hawthorne Street San Francisco, CA 94105

WASTE & CHEMICAL ENFORCEMENT RCRA COMPLIANCE EVALUATION INSPECTION REPORT

Purpose: RCRA Compliance Evaluation Inspection

Facility: Space Exploration Technologies

Location: 1 Rocket Road, Hawthorne, CA 90250

EPA ID Number: CAR 000 191 536

Date of Inspection: September 21, 20015

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Report Prepared By: John Brock

Report Date: October 21, 2015

Introduction

On September 21, 2015, U.S. Environmental Protection Agency (EPA) representatives conducted an unannounced site inspection of the Space Exploration Technologies (SpaceX) facility in Hawthorne, CA. The purpose of the inspection was to determine SpaceX's compliance with applicable federal environmental statutes and regulations, and in particular, the Resource Conservation and Recovery Act (RCRA), as amended, the regulations provided in the Code of Federal Regulations (CFR), Chapter 40, Parts 261-265, 268, and 279, and the California Code Regulations (CCR), Title 22, Division 4.5 and the California Health and Safety Code, Division 20.

The inspectors conducted a physical inspection of the facility and reviewed records related to SpaceX's hazardous waste management practices. This inspection report summarizes the events that transpired during the inspection, observations made by the inspectors, and materials received by the facility after the inspection.

Facility Background

Facility Name	Space Exploration Technologies			
Established	2002; at current location since November 2007			
Number of Employees	3500			
Facility Size	500,000 square feet			
Hours of Operation	Portions of facility are 24/7			
Filed Notification of	April 17, 2008			
Hazardous Waste Activity				
Facility Processes	SpaceX designs and manufactures launch vehicles for placing satellites into orbit and for delivering cargo to the international space station. SpaceX designed and is manufacturing the liquid-fuel rocket that powers the launch vehicle as well as the avionics throughout the vehicle.			
Waste Streams	Waste alodine (D002, D007), waste acetone (F003), waste isopropyl alcohol and phenol (D001), waste rocket propellant (D001), paint waste (D001, F003, F005), waste resin and epoxy (D001), waste etch (D002), magnesium chips in oil (D001, D003), machine shop coolant (CA 223), waste filters (CA 352), spent lamps and batteries (universal waste)			
Generator Status	Large Quantity Generator (LQG)			
Last Inspection	According to EPA's RCRAInfo database, a RCRA compliance evaluation inspection has never been conducted at this SpaceX location.			

Facility Inspection

After an in-brief, the inspectors were given a tour of the facility. The following table summarizes the potential violation found in hazardous waste storage area #2.

Hazardous Waste Storage Area – Potential Violation

Location	Container Type	Waste Type	Potential Violation	Note
Hazardous			No	Fixed
Waste Storage		Universal waste	accumulation	that
Area (X-box)	1 55-gallon container	(sodium lamps)	start date	day

Record Review

Reviewed the following records:

- Manifests
- Land Disposal Restriction (LDR) Notifications
- Biennial Report
- Contingency Plan
- Training Plan
- Training Records
- Inspection Log.

Manifest 3009937658, which was shipped 3/11/14, did not have a final signed copy from the TSDF. SpaceX emailed the return copy to EPA on 9/22/15.

Out brief

EPA identified the two potential violations to SpaceX during the out brief. The label problem with the universal waste lamps was corrected already, and was attributable to a new employee who did not complete all elements of the label. SpaceX said they would track down the return manifest EPA found. It was sent to EPA via email the next day. There are no further outstanding items.